

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended): A cored wire injection process for introducing fluxes and alloying additives in liquid steel bath after adjusting bath temperature to approximately 1630°C and the chemistry of liquid steel in a secondary treatment unit, a ladle of said treatment unit having a 3 m liquid column height, said injection process comprising the steps of:

releasing said additives very close to the bottom of ~~[[a]]~~ the ladle at a depth of approximately 3 m by injecting, at a predetermined speed of approximately 110 m/min, a prefabricated cored wire, configured to have dimensions appropriate for maximum utilization of said additives, said dimensions being 18 mm in diameter and 0.8 mm in sheath thickness, these dimensions of said prefabricated cored wire and this predetermined speed of injection being determined depending on the grade of liquid steel, treatment temperature, ladle size, and liquid column height, and properties of cored wire material.

Claim 2 (Cancelled)

Claim 3 (Currently Amended): The process as claimed in claim 1, wherein ~~the dimensions of said cored wire are more than 13 mm in diameter and more than 0.4 mm in sheath thickness to suit steel grades of high liquidus temperature and/or treatment temperature in a~~ the ladle is a 140 ton ladle with 3 m liquid column height.

Claims 4-5 (Cancelled)

Claim 6 (Previously Presented): The process as claimed in claim 1, wherein said additive is a ferro-alloy material.

Application No. 10/589,028
Paper Dated: March 2, 2009
In Reply to USPTO Correspondence of November 28, 2008
Attorney Docket No. 4544-061763

Claim 7 (Previously Presented): The process as claimed in claim 1, wherein said additive is a calcium bearing material.

Claim 8 (Previously Presented): The process as claimed in claim 7, wherein said calcium bearing material comprises calcium-silicide.

Claim 9 (Previously Presented): The process as claimed in claim 7, wherein said calcium bearing material comprises calcium iron.